

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 16

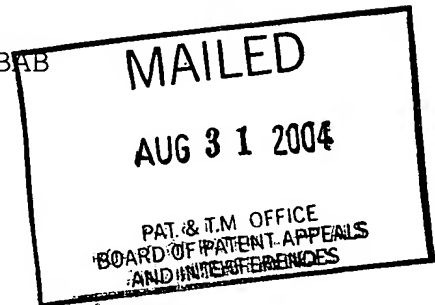
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES J. FINLEY and MEHRAN ARBAB

Appeal No. 2004-1840
Application No. 10/075,021

ON BRIEF



Before CAROFF, PAK, and OWENS, Administrative Patent Judges.

CAROFF, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 21-52, all the claims pending in appellants' involved application.

All of the claims on appeal are directed to a substrate which has been coated with an amorphous sputtered metal film. The metal film may be converted to a crystalline metal oxide film by thermal oxidation. In addition, an amorphous sputtered metal oxide film may be deposited over the amorphous metal film.

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Claim 21, the first of four independent claims, is reproduced below to highlight the basic features of appellants' invention:

21. A coated product comprising:

a substrate;

a film sputtered from a metal cathode target in an atmosphere comprising inert gas and reactive gas, the metal in the metal cathode target having a reactive gas switch point, wherein the concentration of the reactive gas during sputtering is below the reactive gas switch point such that the metal target is sputtered in a metallic mode to deposit a metal film having an amorphous structure defined as an amorphous metal film; and

a metal oxide film over the amorphous metal film.

The prior art references relied upon by the examiner on appeal are:

Khanna et al. (Khanna)	4,522,844	Jun. 11, 1985
Depauw et al. (Depauw)	5,110,662	May 5, 1992

The following rejections are before us for review:¹

I. Claims 38-42 stand rejected under 35 U.S.C. § 112, first paragraph.

II. Claim 40 stands separately rejected under 35 U.S.C. § 112, first paragraph.

¹The examiner states in his answer (p. 2) that a 35 U.S.C. § 112 rejection of claim 51, and a 35 U.S.C. § 102(b) rejection of claims 21-52, have been withdrawn.

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III. Claims 50 and 52 also stand rejected under 35 U.S.C. § 112, first paragraph.

IV. Claims 21-52 stand rejected for obviousness under 35 U.S.C. § 103 in view of Khanna taken in combination with Depauw.

We have carefully reviewed the record on appeal in light of the positions taken by the appellants and by the examiner. Having done so, we shall affirm all of the outstanding rejections under 35 U.S.C. § 112, first paragraph. However, we reverse the rejection of claims 21-52 under 35 U.S.C. § 103.

With regard to each of the 35 U.S.C. § 112 rejections, the issue before us is limited to the merits of the rejection with regard to claims of record. Appellants do not dispute the propriety of any of the 35 U.S.C. § 112 rejections on the merits. Rather, appellants complain in their reply brief that an amendment submitted after final rejection should have been entered. However, non-entry of an amendment is a petitionable matter and, thus, not before us on appeal (see Manual of Patent Examining Procedure (MPEP) § 1201 and § 1002.02(c)).

Accordingly, since appellants do not contest any of the 35 U.S.C. § 112 rejections on the merits, those rejections are summarily affirmed.

We now turn to the rejection of claims 21-52 under 35 U.S.C. § 103. Based upon the record before us, we agree with the appellants that the examiner has failed to establish a prima facie case of obviousness. In our opinion, the examiner has not met his burden of establishing obviousness for the following reasons.

First of all, although the primary reference (Khanna) refers to an amorphous sputtered metal film, the teachings in Khanna are specific only to metal alloys composed of transition metals and metalloids, not individual metals or pure metal alloys. Thus, it would appear that the amorphous metal films taught by Khanna would be of different composition than the amorphous metallic film of appellants' claims.

Furthermore, the combination of Khanna with Depauw is not tenable since we find that their disclosures provide insufficient motivation, other than through hindsight, to deposit a metal oxide film over the amorphous metal or metal alloy film of Khanna. Khanna provides an amorphous metal coating as an outer film to prevent corrosion of the underlying substrate. Depauw's outer sacrificial metal oxide overcoat serves a similar purpose with regard to an underlying reflective layer of silver. See Depauw at col. 1, ll. 48-66, and col. 3, ll. 10-35. Thus, there

appears to be no good reason why an ordinary artisan would deposit a protective metal oxide film over an amorphous metal coating since, according to Khanna, an amorphous metal coating already provides corrosion resistance for an underlying substrate.

Also, with regard to claims which call for oxidation of the amorphous metal film, e.g., claim 48, we find no motivation to oxidize Khanna's amorphous metal film when Khanna teaches that the unoxidized film already provides corrosion resistance for the underlying substrate. While Depauw (col. 5, ll. 21-35) teaches oxidation of a metal film, this teaching only relates to a coating overlying a silver layer, rather than relating to the undercoating which is adjacent to the substrate.

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For the foregoing reasons, the decision of the examiner is affirmed as to claims 38-42, 50 and 52, and reversed as to claims 21-37, 43-49, and 51.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

Marc L. Caroff
MARC L. CAROFF

MARC L. CAROFF//
Administrative Patent Judge


CHUNG K. PAK
Administrative Patent

~~CHUNG K. PAK~~
Administrative Patent Judge

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